

## ABSTRACT

An optical imaging system includes a system of optical components for generating an image of a surface of a component which emits light which is radially symmetrical, at least in part, for an optical surface measurement thereof, the surface normal of the radially symmetrical region in the measuring position of the component being inclined at a maximum angle of  $90^\circ$  with respect to the component axis. Radially symmetrical outer surface regions having surface normals directed at an angle with respect to the axis of symmetry may be quickly and easily provided for testing surface characteristics by designing the system for measuring outer surfaces, and including a mirror which may be associated with the component and which in measuring mode captures the portion of the beam emitted from the radially symmetrical region of the surface to be measured and supplies same to additional imaging components in the system for processing the image.